

Remarks

Claims 1-4, 6-9, and 11-19 are pending in this application. Claims 1-4, 6-9, and 11-19 stand rejected. Claims 13-19 are withdrawn from consideration.

The rejection of Claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by either Wivagg (US 6,463,114) or Weems et al. (US 5,964,029) is respectfully traversed.

Wivagg describes a jack screw replacement device. The device 50 includes two jack blocks 51, 52, a wedge 53, a jack washer 54, and an adjustment screw 55. The jack blocks each have sloping sides 56, and a dual-chamfered side 57 positioned opposite the sloped side 56. The wedge 53 has a plurality of sloped sides 58, a top portion 69, and a bottom portion 59, and is movably positioned between the jack blocks 51, 52. The sloped sides 58 are coextensive, having equivalent slopes with the sloping sides 56. The adjustment screw 55 extends through the jack washer 54, between the sloping sides 56 of the blocks 52, 54, and into a threaded opening 67 in the wedge 53 that extends from the top portion 69 to the bottom portion 59.

Claim 1 of the present application recites a piping support wedge apparatus for a jet pump in a nuclear reactor that includes "a first tapered wedge segment comprising a first end portion and a second end portion; a second tapered wedge segment comprising a first end portion and a second end portion, said first and second wedge segments joined at said second end portions to form a substantially U-shaped body, said first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of said apparatus; and a slot defined by an area between said first and second wedge segments and extending from said first end portions to said joined second end portions of said wedge segments".

Wivagg does not describe nor suggest a piping support wedge apparatus as recited in Claim 1. Particularly, Wivagg does not describe nor suggest a piping support wedge apparatus that includes first and second tapered wedge segments joined at their second end portions to form a substantially U-shaped body, and with the first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of the apparatus. Rather, Wivagg describes a device that includes two jack blocks having sloping sides that are spaced apart to permit a wedge to be movably positioned between the blocks. The two jack blocks are not joined at one end to form a U-shaped body. Rather the two blocks are spaced apart and are moved further apart by the movement of the wedge when the adjustment screw is tightened. Further, Figures 6-8 clearly show that the jack blocks 51 and 52 are aligned and not rotated with respect to each other along a longitudinal axis of the apparatus. The Office Action, at page 4, suggests that the term "rotated" means that "the two segments of the claimed wedge are symmetrical with respect to the longitudinal axis 98". Applicant respectfully submits that this interpretation of the term "rotated" is incorrect. Figure 5 of the present application shows that wedge segments 82 and 88 are rotated with respect with each other. Particularly, Figure 5 shows that the wedge segments 82 and 88 are in different planes. In other words, the transverse axis (the axis that intersects the longitudinal axis at 90 degrees) of each wedge segment are not parallel to each other, and therefore, are rotated with respect to each other. The jack blocks 51 and 52 of Wivagg are aligned with each other because they are in the same plane. Accordingly, Applicant submits that Claim 1 is patentable over Wivagg.

Claims 2-4 depend from independent Claim 1. When the recitations of dependent Claims 2-4 are considered in combination with the recitations of Claim 1, Applicant respectfully submits that Claims 2-4 likewise are patentable over Wivagg.

Weems et al. describe an apparatus for repairing cracked core spray supply piping that includes a pair of clamps 112 and 114 extending circumferentially around the pipe on opposite sides of a crack. Referring to Figures 3-6, "each of the clamps 112 and 114 includes a pair of clamp bodies or jaws 120 and 122 with opposed concave surfaces 124 and 126 of arcuate configuration". See Col. 8 lines 40-59. Weems et al. do not describe nor suggest a wedge apparatus, and Applicant submits that one skilled in the art would not use the clamps described by Weems et al. as a wedge apparatus.

Weems et al. do not describe nor suggest a piping support wedge apparatus as recited in Claim 1. Particularly, Weems et al. do not describe nor suggest a piping support wedge apparatus that includes first and second tapered wedge segments joined at their second end portions to form a substantially U-shaped body, and with the first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of the apparatus. Rather Weems et al. describe a clamp apparatus. The Office Action suggests at pages 5 and 6 that "first tapered wedge segment" reads on structure 136 and that "second tapered wedge section" reads on structure 126. Applicant disagrees with this suggestion. Particularly, Col. 8 lines 50-52 describe structure 136 as the outer surface or face of body portion 128 of clamps 112 and 114. Further, Col. 8, lines 40-42 describe structure 126 as a concave surface of clamp jaw 122 of clamps 112 and 114. Weems et al. do not describe that clamp jaws 120 and 122 are tapered wedge sections. Rather Weems et al. describe that clamp jaws include opposed concave surfaces 124 and 126 of

arcuate configuration. Applicant submits that clamp jaws 120 and 122 described by Weems et al. are not tapered wedge sections. Further, clamp jaws 120 and 122 are not rotated with respect to each other along a longitudinal axis of the clamp apparatus. Accordingly, Applicant submits that Claim 1 is patentable over Weems et al.

Claims 2-4 depend from independent Claim 1. When the recitations of dependent Claims 2-4 are considered in combination with the recitations of Claim 1, Applicant respectfully submits that Claims 2-4 likewise are patentable over Weems et al.

For the reasons set forth above, Applicant respectfully requests that the Section 102(b) rejection of Claims 1-4 be withdrawn.

The rejection of Claims 6-9 and 11-12 under 35 U.S.C. § 103(a) as being unpatentable over the prior art wedges described in the present application in view of either one of Wivagg or Weems et al. is respectfully traversed.

Claim 6 of the present application recites a nuclear reactor jet pump assembly that includes "a piping support wedge apparatus positioned between said restrainer bracket and said inlet mixer, said wedge apparatus comprising: a first tapered wedge segment comprising a first end portion and a second end portion; a second tapered wedge segment comprising a first end portion and a second end portion, said first and second wedge segments joined at said second end portions to form a substantially U-shaped body, said first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of said apparatus; and a slot defined by an area between said first and second wedge segments and extending from said first end portions to said joined second end portions of said wedge segments".

The prior art wedges described in the present application, Wivagg, and Weems et al., alone or in combination, do not describe nor suggest a nuclear reactor jet pump assembly as recited in Claim 6. Particularly, the prior art wedges described in the present application, Wivagg, and Weems et al., alone or in combination, do not describe nor suggest a piping support wedge apparatus that includes first and second tapered wedge segments joined at their second end portions to form a substantially U-shaped body, and with the first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of the apparatus. Rather, the Office Action admits on page 7 that the specifics of the wedge apparatus recited in Claim 6 is not shown by the prior art wedges described in the present application. Also, as described above, neither Wivagg nor Weems et al. describe nor suggest a wedge apparatus that includes first and second tapered wedge segments joined at their second end portions to form a substantially U-shaped body, and with the first and second tapered wedge segments rotated with respect to each other along a longitudinal axis of the apparatus. Accordingly, Accordingly, Applicant submits that Claim 6 is patentable over the prior art wedges described in the present application, Wivagg, and Weems et al., alone or in combination.

Claims 7-9 and 11-12 depend from independent Claim 6. When the recitations of dependent Claims 7-9 and 11-12 are considered in combination with the recitations of Claim 6, Applicant respectfully submits that Claims 7-9 and 11-12 likewise are patentable over the prior art wedges described in the present application, Wivagg, and Weems et al., alone or in combination.

For the reasons set forth above, Applicants respectfully request that the Section 103(a) rejection of Claims 6-9 and 11-12 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Favorable action is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael Tersillo", written over a horizontal line.

Michael Tersillo
Registration No. 42,180
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070